

**REMARKS**

At least new Claims 36-55 have been copied from U.S. Patent Application No. 10/770,732 by Bossard, *et al.*, filed on February 2, 2004, and published as U.S. Patent Application Publication No. 2004/0244589 on December 9, 2004 ("the Bossard patent application"), for the purpose of provoking an Interference with that pending patent application. Note that the word "base" has been deleted in Claim 38 as compared to Claim 3 of the Bossard patent application. Claims 56 and 57 are based on Claims 1 and 3 of the Bossard patent application.

**Request for an Interference Pursuant to 37 C.F.R. § 41.202(a)**

Applicants hereby request an Interference pursuant to 37 C.F.R. § 41.202(a). The information required under 37 C.F.R. § 41.202(a) is set forth under paraphrased headings (1)-(6) below which correspond to the subsections of 37 C.F.R. § 41.202(a) to facilitate consideration by the Examiner.

**(1) Sufficient information to identify the application with which the Applicants seek an Interference**

Applicants respectfully request that an Interference be declared between the above-identified application and U.S. Patent Application No. 10/770,732 by Bossard, *et al.*, filed on February 2, 2004, and published as U.S. Patent Application Publication No. 2004/0244589 on December 9, 2004 ("the Bossard patent application").

**(2) Identification of all claims that Applicants believe interfere, proposal of one or more counts, and a showing of how the claims correspond to one or more counts**

Applicants submit that the subject matter of Claims 1-7, 9-21, 25-27, 29-31, and 34-35 and new Claims 36-57 of the present patent application and Claims 1-20 of the Bossard Application interferes.

Applicants suggest the following proposed Counts:

***Proposed Count I:***

A composite gas separation module, comprising:

- a) a porous metal substrate;
- b) an intermediate porous metal layer which includes a hydrogen permeable material, wherein the intermediate porous metal layer overlies the porous metal substrate;  
and
- c) a dense hydrogen-selective membrane, wherein the dense hydrogen-selective membrane overlies the intermediate porous metal layer.

Claims 1-7 and 9-14, new Claims 36-46 and 56-57, and Bossard Claims 1-11 correspond to Proposed Count I. The subject matter of Proposed Count I, if treated as prior art to the claims, anticipates or renders obvious the subject matter of Claims 1-7 and 9-14, new Claims 36-46 and 56-57, and Claims 1-11 of the Bossard application.

***Proposed Count II:***

A method for selectively separating hydrogen gas from a hydrogen gas-containing gaseous stream, comprising the step of:

directing the hydrogen gas-containing gaseous stream to a composite gas separation module, wherein the composite gas separation module includes:

- a) a porous metal substrate;
- b) an intermediate porous metal layer which includes a hydrogen permeable material, wherein the intermediate porous metal layer overlies the porous metal substrate;  
and
- c) a dense hydrogen-selective membrane, wherein the dense hydrogen-selective membrane overlies the intermediate porous metal layer;

whereby hydrogen gas is at least partially partitioned from the gaseous stream by passing through the dense hydrogen-selective membrane.

Claims 29-31 and 34-35, new Claims 47-50, and Bossard Claims 12-15 correspond to Proposed Count II. The subject matter of Proposed Count II, if treated as prior art to the claims, anticipates or renders obvious the subject matter of Claims 29-31 and 34-35, new Claims 47-50, and Claims 12-15 of the Bossard application.

***Proposed Count III:***

A method for fabricating a composite gas separation module, comprising the steps of:

- a) applying an intermediate porous metal layer, which includes a hydrogen permeable material, over a porous metal substrate; and
- b) applying a dense hydrogen-selective membrane over the intermediate porous metal layer, thereby forming the composite gas separation module.

Claims 15-21 and 25-27, new Claims 51-55, and Bossard Claims 16-20 correspond to Proposed Count III. The subject matter of Proposed Count III, if treated as prior art to the claims, anticipates or renders obvious the subject matter of Claims 15-21 and 25-27, new Claims 51-55 and Claims 16-20 of the Bossard application.

- (3) Claim chart comparing at least one claim of each party corresponding to the count and a showing of why the claims interfere within the meaning of 37 C.F.R. § 41.203(a)**

Applicants have attached Claim Charts, as Exhibits A, B and C, comparing two claims of the present application and one claim of the Bossard Application corresponding to each of the proposed Counts.

Applicants' Claim 37 was copied from the Bossard application. Since the claim language is essentially identical, the subject matter of Applicants' Claim 37 would, if prior art, anticipate or render obvious the subject matter of the Bossard Claim 2, and vice versa. In addition, the subject matter of Applicants' Claim 5 would, if treated as prior art, anticipate or render obvious

the subject matter of the Bossard Claim 2, and vice versa. Therefore, the claims interfere within the meaning of 37 C.F.R. § 41.203(a).

Applicants' Claim 49 was copied from the Bossard application. Since the claim language is essentially identical, the subject matter of Applicants' Claim 49 would, if prior art, anticipate or render obvious the subject matter of the Bossard Claim 14, and vice versa. In addition, the subject matter of Applicants' Claim 29 would, if treated as prior art, anticipate or render obvious the subject matter of the Bossard Claim 14, and vice versa. Therefore, the claims interfere within the meaning of 37 C.F.R. § 41.203(a).

Applicants' Claim 54 was copied from the Bossard application. Since the claim language is essentially identical, the subject matter of Applicants' Claim 54 would, if prior art, anticipate or render obvious the subject matter of the Bossard Claim 19, and vice versa. In addition, the subject matter of Applicants' Claim 20 would, if treated as prior art, anticipate or render obvious the subject matter of the Bossard Claim 19, and vice versa. Therefore, the claims interfere within the meaning of 37 C.F.R. § 41.203(a).

**(4) Explanation of why the Applicants will prevail on priority**

Applicants' present application claims the benefit of U.S. Provisional Patent Application Serial No. 60/457,061, filed on March 21, 2003. The Bossard application claims priority to U.S. Provisional Patent Application Serial No. 60/475,620, filed on June 4, 2003. Therefore, since Applicants were the first to file a patent application directed to the subject matter of the Proposed Counts, Applicants will prevail on priority.

**(5) If a claim has been added or amended to provoke an Interference, a claim chart showing the written description for each claim that has been added**

Applicants have attached a Claim Chart, as Exhibit D, showing the written description for each claim that has been added. Written Description references refer to pages and lines in the application as filed.

- (6) **For each constructive reduction to practice for which the Applicants wish to be accorded benefit, a claim chart showing where the disclosure provides a constructive reduction to practice within the scope of the interfering subject matter**

Applicants have attached a Proposed Count Chart, as Exhibit E, showing where the disclosure of U.S. Provisional Patent Application Serial No. 60/457,061, to which the present application claims the benefit, provides a constructive reduction to practice for each Count that has been proposed.

### CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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